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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HASAN, SYED Y

ART UNIT

PAPER NUMBER

2621

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/748,263	Applicant(s) TAIRA ET AL.	
	Examiner SYED Y. HASAN	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 - 12 filed on 9/10/2009 have been considered but are moot in view of the new ground(s) of rejection.

Watanabe et al (US 5298994) discloses the range of X-coordinate value and Y-coordinate value being changed depending on a TV system (col 5, line 43 to col 6, line 51). Here figs. 9, 10 and 11 display various ranges of x and y coordinates for High vision signal and conventional TV system. Since Mimura et al has already disclosed the button formation, Watanabe et al is disclosing the limitation mentioned above. In the same way Nagasawa et al (US 5933572) discloses a flag describing whether a high definition group exists (figs 9 – 11, col 13, lines 18 – 30). Here again the button formation is already disclosed by Mimura et al and Nagasawa et al is overcoming the limitation mentioned above. Both of these prior art are overcoming the limitation for claim 1.

Shunji (JP 2002-300525) discloses the expansion process high definition and standard definition (para 0012 for high definition and para 0013 for standard definition) as mentioned in claim 7.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent

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Subject Matter Eligibility “(Official Gazette notice of 22 November 2005), Annex

IV reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 1, 2, 7 and 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 1 defines “computer readable information storage medium storing highlight information” Here “storing highlight information” is merely non-functional descriptive material stored on the computer readable medium. Examiner recommends either cancelling the claim or adding language to the claim that indicates an action taking place by the computer readable storage medium. This claim language needs to be supported by the specification.

In the state of the art, transitory signals are commonplace as a medium for transmitting computer instructions and thus in the absence of any evidence to the contrary and given the broadest reasonable interpretation, the scope of a “computer readable medium” covers a signal per se. A transitory signal does not fall within the definition of a process, machine, manufacture or composition of matter.

Since claims 2, 7 and 10 depend on claim 1, therefore they are also rejected.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) and further in view of Nagasawa et al (US 5933572)

Regarding **claim 1**, Mimura et al et al discloses a computer readable (col 32, lines 59 – 65, computer readable) information storage medium storing highlight information with which a mixture or contrast of a video and sub-picture in a rectangular area in which a button is displayed is altered

wherein the highlight information includes highlight general information (fig 51, 52, 113A) and a button information table (fig 51, 52, 113C) the button information table includes items of button information (fig 52, 113C) and is used as one- group mode or plural-group mode (fig 52, one group is 36, two group is 18, col 25, lines 31 - 45) each of the items of button information includes button position information (fig 57, 113J) the button position information includes a start X-coordinate, an end X-coordinate, a start Y-coordinate, and an end Y-coordinate of the rectangular area (fig 58, col 28, lines 20 – 34) the highlight general information includes a button

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mode field (fig 57 and 58, col 27, line 64 to col 28, line 12) and the button mode field includes a first flag describing whether a button group exists or not, bits describing the number of button groups, and bits describing a display type of a sub-picture corresponding to the button group (col 26, lines 45 - 57)

However Mimura et al et al does not disclose the range of X-coordinate value and Y-coordinate value being changed depending on a TV system and a flag describing whether a high definition group exists.

On the other hand Watanabe et al teaches the range of X-coordinate value and Y-coordinate value being changed depending on a TV system (col 5, line 43 to col 6, line 51)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the range of X-coordinate value and Y-coordinate value being changed depending on a TV system as taught by Watanabe et al in the system of Mimura et al in order to provide different aspect ratio for different tv systems.

The combination of Mimura et al and Watanabe et al does not disclose a flag describing whether a high definition group exists.

On the other hand Nagasawa et al teaches a flag describing whether a high definition group exists (figs 9 – 11, col 13, lines 18 – 30)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a flag describing whether a high definition group exists as taught by Nagasawa et al in the combined system of Mimura et al and Watanabe et al in order to utilize a flag to discriminate between high definition systems.

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5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) in view of Nagasawa et al (US 5933572) and further in view of Tsumagari et al (US 2004/0062530)

Regarding **claim 10**, Mimura et al, Watanabe et al and Nagasawa et al disclose a computer readable information storage medium (see claim 1 above) except for wherein the medium stores a program chain information and the program chain information includes a program chain general information which includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition.

On the other hand Tsumagari et al teaches wherein the medium stores a program chain information and the program chain information includes a program chain general information which includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition (para 0033 illustrates program chain for SD and HD, para 0047 illustrate sub-picture and paras 0053 and 0054 illustrate sub-picture with decoder).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein the medium stores a program chain information and the program chain information includes a program chain general information which

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includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition as taught by Tsumagari et al in the combined system of Mimura et al, Watanabe et al and Nagasawa et al in order to record two types of video objects including HD (high definition) contents and SD (standard definition) contents.

6. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) in view of Nagasawa et al (US 5933572) in view of Tsumagari et al (US 2004/0062530) and further in view of Shunji (JP 2002-300525)

Regarding **claim 7**, Mimura et al, Watanabe et al, Nagasawa et al and Tsumagari et al disclose all of the above (see claim 1 and 10 above) except the end X-coordinate and the end Y - coordinate for high definition are larger than the end X-coordinate and the end Y- coordinate for standard definition. Mimura et al further discloses the X-coordinate and the Y-coordinate (fig 58, col 28, lines 20 – 34) but it does not disclose the expansion process between high definition and standard definition

On the other hand Shunji teaches the expansion process high definition and standard definition (para 0012 for high definition and para 0013 for standard definition)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the expansion process high definition and standard definition as taught by Shunji in the combined system of Mimura et al, Watanabe et al Nagasawa et al and Tsumagari et al in order to provide the digital video recording device which can record high definition image data and more nearly high-definition title

data, while having maximum transfer rate restrictions of a stream, and the capacity restriction of a recording medium.

Regarding **claim 2**, Mimura et al et al discloses a computer readable information storage medium, wherein, the button information table includes m items of button information; and the table is used as one-group mode made up of m items of button information, two-group mode made up of $m/2$ items of button information, or three-group mode made up of $m/3$ items of button information, where m is an integer (fig 51 and 52, col 25, lines 31 - 57)

7. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) in view of Nagasawa et al (US 5933572) and further in view of Mori et al (US 2002/0110369)

Regarding **claim 3**, Mimura et al, Watanabe et al and Nagasawa et al disclose all of the claimed features as mention in claim 1 above together with Miruma et al the playback apparatus as mentioned in the title and field of invention as reproducing (col 1, lines 12 to 20) except the information playback apparatus comprising: means for reading out the flag and the display type from the information recording medium; means for, when the flag indicates that a high definition button group is recorded, displaying the read-out button information with high definition, and when the flag indicates that a high definition button group is not recorded, displaying the read-out button information according to the display type.

On the other hand Mori et al teaches the information playback apparatus comprising: means for reading out the flag (para 0153 illustrates a flag) and the display

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type from the information recording medium (para 0420 illustrates variety of displays) means for, when the flag indicates that a button group is recorded (para 0232 illustrates recording on the disk) displaying the read-out button information (fig 40) and when the flag indicates that a button group is not recorded, displaying the read-out button information according to the display type (para 0256 and fig 50 para 0305)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the information playback apparatus comprising: means for reading out the flag and the display type from the information recording medium means for, when the flag indicates that a button group is recorded, displaying the read-out button information, and when the flag indicates that a button group is not recorded, displaying the read-out button information according to the display type as taught by Mori et al in the combined system of Mimura et al, Watanabe et al and Nagasawa et al in order to realize reproduction of high quality digital audio data along with video data in a restricted range of bit rates at a relatively low cost.

Claim 5 is rejected based on claim 3 above

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) in view of Nagasawa et al (US 5933572) in view of Mori et al (US 2002/0110369) and further in view of Tsumagari et al (US 2004/0062530)

Regarding **claim 11**, Mimura et al, Watanabe et al, Nagasawa et al and Mori et al disclose an information playback apparatus (see claim 3 above) except for wherein the medium stores a program chain information and the program chain information

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includes a program chain general information which includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition.

On the other hand Tsumagari et al teaches wherein the medium stores a program chain information and the program chain information includes a program chain general information which includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition (para 0033 illustrates program chain for SD and HD, para 0047 illustrate sub-picture and paras 0053 and 0054 illustrate sub-picture with decoder).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein the medium stores a program chain information and the program chain information includes a program chain general information which includes a program chain sub-picture stream control table which includes a second flag and a decoding field of a sub-picture stream for 4:3 or HD, the second flag describing whether the decoding field is used for decoding a sub-picture stream for high definition or standard definition as taught by Tsumagari et al in the combined system of Mimura et al, Watanabe et al, Nagasawa et al and Mori et al in order to record two types of video objects including HD (high definition) contents and SD (standard definition) contents.

Claim 12 is rejected based on claim 11 above.

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9. Claims 4, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al (US 5963704) in view of Watanabe et al (US 5298994) in view of Nagasawa et al (US 5933572) in view of Mori et al (US 2002/0110369) in view of Tsumagari et al (US 2004/0062530) and further in view of Shunji (JP 2002-300525)

Claim 4 and 6 are rejected based on claim 2 above.

Claims 8 and 9 are rejected based on claim 7 above.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Yamauchi et al (US 5771334) discloses Multimedia optical disc storing both video titles provided with AV functions and video titles with no such functions which can instantly distinguish between such kinds of titles, and a reproduction apparatus and reproduction method for such disc

Park et al (US 6724981) discloses Apparatus and method for transferring digital versatile disc information

Denda et al (US 7061838) discloses an apparatus and method for caching and selectively reproducing information from recording media.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.Y.H./
12/11/2009

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621